

NASA TECH BRIEF

Marshall Space Flight Center



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Integrated Multi-Path Program Analysis and Cost Technique (IMPACT)

The problem:

To determine the impact cost and "worth" value of decisions in the definition phase of a multi-program project.

The solution:

The computer program will determine at any chronological point in the project what would be the optimum path and result of any decision.

How it's done:

In the definition phase all potential decisions are listed with cost estimates and options. Some options from one decision would conflict with options from other decisions and thus could be ruled out. Other combinations show definite undesired increases or decreases in certain segments and could be ruled out. Several types of displays were considered but the graphical method proved to be most readable and manageable and was therefore selected. The computer program was then developed to incorporate

all the decisions and their options, to activate cost factors included in certain combinations of decisions, and to dictate decisions when certain combinations of other decisions so required. By this method we are able to select the lowest cost for suitable performance in a project.

Notes:

1. This program was written in FORTRAN II for use on a SDS-930.
2. Inquiries concerning this program should be directed to:

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